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## United States Patent [19

### Kuroda et al.

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[45]

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[54]	ROTATION CONTROL APPARATUS
	OPERATING WITH A SYNC SIGNAL
	HAVING VARIABLE INTERVALS

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## Related U.S. Application Data

- [63] Continuation of application No. 08/816,138, Mar. 12, 1997, Pat. No. 5,875,763.
- [30] Foreign Application Priority Data

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- [51] Int. Cl.<sup>6</sup> ...... G11B 7/00

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[57] ABSTRACT

A rotation control apparatus which can maintain an accurate rotating state even in a high density optical disk (DVD) having a structure such that parts of the sync signal are recorded at an interval different from that of the other sync signal parts. The apparatus has: a unit period signal generator for generating a period signal of a unit period; a pre-pit detector for detecting a pre-pit from the DVD; a phase difference detector for detecting a phase difference between the detection timing of the pre-pit and the unit period signal; and a holding circuit for holding the phase difference detected. The rotation of the DVD is controlled on the basis of the phase difference held at the holding circuit.

#### 4 Claims, 11 Drawing Sheets

